

1 CLAIM 1. (currently amended) Apparatus for massaging the  
2 spinal area of a person's back, comprising a table having a main  
3 frame and an upper surface for support of a person reclining in a  
4 supine position looking up; said table having a head end, a foot  
5 end, and opposed sides; an array of thrusters; each of said  
6 thrusters terminate in a back engaging fixture at an upper end  
7 thereof and having a lower end opposed to the upper end; said  
8 fixture includes spaced finger shaped protrusions depending  
9 therefrom and arranged to simultaneously engage and massage both  
10 sides of the spinal area;

11 said upper surface has an upwardly opening, longitudi-  
12 nally extending groove formed therein that is equal distant from  
13 the table sides through which said thrusters extend;

14 an elongated vibrating member for supporting and vibrat-  
15 ing said thrusters, said vibrating member having opposed ends and  
16 positioned in underlying relationship respective said table surface  
17 for reciprocatingly receiving each of said thrusters which are  
18 arranged in spaced relationship along a medial length thereof to  
19 simultaneously bring said finger shaped protrusions into engage-  
20 ment respective both sides of the spinal area of the back, and  
21 biasing means at the lower end of each thruster;

22 an upper slide bearing reciprocatingly receiving a medial  
23 length of said vibrating member;

24 said opposed ends, respectively, of said elongated vi-  
25 brating member are connected for movement between a crank means and  
26 a pivoted bearing means, respectively; and means for rotating said  
27 crank means to induce a rapidly reciprocating motion respective the  
28 longitudinal axis of the vibrating member while the longitudinal  
29 axis of each said thruster is moved in a circle about its vertical  
30 axis and of a magnitude whereby a vibratory sensation is effected

31     respective the spinal area by rotating said crank means at a  
32     relatively high rate of rotation;

33             an elongated spring plate positioned in underlying  
34     relationship respective said elongated vibrating member for engag-  
35     ing the biasing means of the thrusters to elevate each of the  
36     finger shaped protrusions into a curved plane that coincides with  
37     the curvature of the spinal area, whereby, said spring plate  
38     simultaneously engages the spring end of each thruster to thereby  
39     resiliently bias the thrusters into engagement with both sides of  
40     the spinal area.

1             Claim 2. The apparatus of Claim 1, wherein said spring  
2     plate is supported by a base plate, said base plate is slidably  
3     captured within lower slide bearings for fore and aft movement to  
4     thereby move the vibrating member and spring plate concurrently  
5     along a path parallel to the groove;

6             whereby the vibrating member, together with the base  
7     plate impart a longitudinal movement into the vibrating member to  
8     move said thrusters in a spiral pattern, thereby massaging the  
9     spinal area.

1             Claim 3. (currently amended) The apparatus of Claim 2,  
2     and further including an elevating member arranged for movement  
3     towards and away from said vibrating mount assembly; the elevating  
4     means being supported by the base plate to position the thrusters  
5     at an elevation that biases the back engaging fixture against the  
6     spinal area with a predetermined force.

1           Claim 4. (Currently Amended) The apparatus of Claim 1,  
2 wherein said vibrating mount assembly is supported by a base plate,  
3 said base plate is slidably captured within a lower slide bearings  
4 for fore and aft movement to thereby move the vibrating member and  
5 spring plate concurrently along a path parallel to the groove;

6           and further including an elevating member arranged for  
7 movement towards and away from said base plate; and elevating means  
8 supported by said base plate to position the thrusters at an  
9 elevation that biases the back engaging fixture against the spinal  
10 area with a predetermined force;

11           whereby, the vibrating mount assembly together with the  
12 base plate impart a movement into the thrusters that effect a  
13 spiral pattern along the spinal area.

1           Claim 5. (Currently Amended) A massage table having an  
2 interior, a top surface of a curved configuration for receiving a  
3 reclining person looking up; and, an array of thrusters each having  
4 opposed ends with there being a back engaging fixture attached to  
5 one end thereof to simultaneously engage and massage both sides of  
6 the spinal area;

7           an upwardly opening longitudinally extending groove  
8 formed within the top surface through which said thrusters may  
9 ajustably extend towards a person's back;

10           a vibrating member positioned below the top surface in  
11 alignment with the spinal area, with the thrusters being positioned  
12 within the groove and the fixture extended into contact with

13     respect to the back; a lower bearing slide supported respective  
14     said table, a longitudinally extending base plate slidably  
15     supported in low friction relationship respective said lower  
16     bearing slide for reciprocating longitudinally of the spine;

17             a spring board spaced from said base plate and connected  
18     to be moved vertically respective said base plate and said  
19     vibrating member and to be reciprocated longitudinally by said base  
20     plate; elevating means connected to said base plate to selectively  
21     change the spaced apart relationship between said spring board and  
22     said base plate; while the vibrating member is supported respective  
23     the lower bearing slide for the base plate;

24             said vibrating member having opposed ends, guide means  
25     formed in spaced relationship along said vibrating member, said  
26     array of thrusters being spaced from one another, said opposed ends  
27     of said thrusters forming a medial length thereof reciprocatingly  
28     received within said guide means of said vibrating member;

29             said thrusters having a spine engaging end opposed to an  
30     actuating end by which the fixtures of the thrusters are  
31     resiliently forced into contact with the spinal area and recip-  
32     rocated responsive to said vibrating member;

33             the head end of said vibrating member being supported by  
34     a journal means for reciprocal and pivotal movement with the  
35     opposed end thereof being moved with circular movement; whereby,  
36     said thrusters are moved in a circle at a relatively fast rate of  
37     movement which imparts a vibrating sensation in the back while  
38     simultaneously the thrusters move longitudinally at a relatively  
39     slow rate of speed.

1           Claim 6. (currently amended)   The apparatus of Claim 5  
2 wherein said vibrating member is supported by the elevating member  
3 which in turn is supported by an expansible chamber which in turn  
4 is supported by the base plate, said base plate is slidably  
5 captured within slide bearings supported by the table for fore and  
6 aft movement to thereby move the elevating member which moves said  
7 spring plate and thrusters concurrently along a path parallel to  
8 the groove;

9           whereby, the vibrating member together with the base  
10 plate impart a movement into the thrusters that effect a massaging  
11 action while describing a spiraling pattern parallel to and along  
12 both sides of the spinal column.

1           Claim 7. (currently amended)   The apparatus of Claim 5  
2 wherein said vibrating member is supported by said base plate and  
3 is slidably captured within slide bearings for fore and aft  
4 movement to thereby move the spring board and vibrating member  
5 concurrently along a path parallel to the groove;

6           wherein, the elevating member further includes vertical  
7 guides arranged for guiding movement of the spring board towards  
8 and away from said base plate and said expansible chamber is a  
9 pneumatic cylinder supported by said base plate, to position the  
10 thrusters at an elevation that biases the fixture against the  
11 spinal area with a predetermined force;

12           whereby, the vibrating support together with the base  
13 plate impart a movement into the thrusters that effect a spiral  
14 massaging pattern along either side of the spine.

1           Claim 8. (currently amended) The apparatus of Claim 5,  
2 wherein said vibrating member is supported by a base plate, said  
3 base plate is slidably captured within slide bearings for fore and  
4 aft movement to thereby move the spring board and vibrating member  
5 concurrently along a path parallel to the groove;

6           and further including elevating means supported by said  
7 base plate to position the thrusters at an elevation that biases  
8 the fixture against the spinal area with a predetermined force;

9           whereby, the vibrating support together with the base  
10 plate impart a movement into the thrusters that effect a spiral  
11 pattern along the spinal area.

1           CLAIM 9. (currently Amended) Massaging apparatus for  
2 massaging a person's back in proximity of the spinal area, said  
3 apparatus comprising a main frame member that forms a top surface  
4 within which there is supported an elongated vibrating bar; a  
5 plurality of thrusters arranged in spaced relationship respective  
6 one another, each of said thrusters having a massaging back  
7 engaging end opposed to a spring end;

8           said elongated vibrating bar reciprocatingly receiving  
9 each said thruster;

10          said vibrating mount bar is provided with a pivoted end  
11 opposed to an oscillated end wherein the oscillated end is moved  
12 with a circular motion while the pivoted end reciprocatingly  
13 receives the marginal pivoted end to thereby move each said  
14 thruster with a different magnitude of oscillatory motion with the

15     thrusters adjacent the oscillated end of the vibrating mount being  
16     moved with the greatest magnitude while the thrusters adjacent the  
  
17     pivoted end of the vibrating bar being moved with a minimum of  
18     movement;  
19             a spring support mounted for movement toward and away  
20     from said vibrating bar and simultaneously engaging each spring end  
21     of said thrusters for moving the massage end of each thruster into  
22     engagement with the spinal area of ones back with a selected force  
23     that is proportional to the selected distance between the spring  
24     support and the vibrating mount;  
25             said spring support is mounted for movement respective to  
26     a base plate, said base plate is mounted for movement respective  
27     said main frame member, whereby, said base plate moves the spring  
28     plate and the vibrating mount bar parallel to the longitudinal axis  
29     of the spine to engage the spinal area with massaging action that  
30     describes a spiral pattern.

1             Claim 10. (Original) The apparatus of Claim 9, wherein  
2     said vibrating bar has spaced apertures for reciprocatingly  
3     receiving a thruster therein.

1             Claim 11. (Currently Amended) The apparatus of Claim  
2     10, wherein said top surface includes a groove extending from a  
3     head end opposed to a foot end and along the spinal area for  
4     receiving the back engaging end of the thrusters therethrough.

1                   Claim 12. (Original) The apparatus of Claim 11, wherein  
2   the pivoted end of said vibrating bar is positioned adjacent the  
3   head end of the groove while the oscillated end of the vertical bar  
4   is positioned at the foot end of the groove.

1                   Claim 13. (Currently Amended) The apparatus of Claim  
2   12, wherein the oscillated end of the bar is vibrated by connecting  
3   the foot end of the bar to a crank that is rotated at a relatively  
4   fast rotational speed while the head end of the bar is pivotally  
5   and reciprocatingly mounted to form the small part of the spiral  
6   which increases in size towards the crank.